

REMARKS

Applicant respectfully requests reconsideration of this application and consideration of the following remarks.

The drawings were objected to because of reference numerals: **6** in relation with Figures 9 and 12, mentioned in lines 6 and 24 on page 24 respectively; **13** in Figure 3; **1** in Figure 4; **18** in Figure 9; **33** in Figure 11; and, **18** and **26** in Figure 12.

Figures 3 and 11 are amended to remove the reference numerals **13** and **33**, which are not mentioned in the description.

It is understood that virtual browser **6** mentioned with Figures 9 and 12 (lines 6 and 24 on page 24) runs on a server (host computer). Figures 9 and 12 show the details of embodiments of portable devices, without showing the server. However, virtual browser **6** is clearly illustrated in Figure 11 and described in the specification, line 29 of page 16 – line 1 of page 17. Thus, the specification is amended to mention Figure 11 in the corresponding paragraphs where virtual browser **6** is mentioned in the detailed description of the embodiments of Figures 9 and 12. No new matter is added, since the specification (page 8, lines 2-3) provides: “To facilitate description, any numeral identifying an element in one figure will represent the same element in any other figure”.

Similarly, reference numerals **1**, **18**, and **26** are already described in the specification with some of the figures (e.g., line 29 of page 16 – line 1 of page 17, lines 22-25 of page 13). The specification is further amended to attach the numerals **1**, **18** and **26** with the corresponding items mentioned in the detailed description of Figures 4, 9 and 12.

The abstract was objected to because of the length. The abstract is amended to reduce the length to less than 150 words.

Claims 1 and 2 were provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 2 of copending Application No. 09/764,418. Claims 1-19 are canceled. The pending claims 20-96 are not identical to the pending claims of Application No. 09/764,418.

Claims 1-4 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for reciting “the outside”, “the rasterized image”, “that image”, for which there were not sufficient antecedent basis for these limitations. Claims 1-19 are canceled. Claims 20-96 are added to particularly point out and distinctly claim the subject matter, which recite limitations with sufficient antecedent basis.

Claims 1, 2, 12, 16 and 17 were rejected under 35 U.S.C. 102(e) as being anticipated by Yamakado (U.S. Patent No. 6,014,133). Further,

claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakado in view of Dorricott (U.S. Patent No. 6,125,209);

claims 4 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakado in view of Tso (U.S. Patent No. 6,185,625);

claims 18 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakado in view of Cronin (U.S. Patent No. 6,182,127);

claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakado and Cronin in view of Gardell (U.S. Patent No. 6,049,831);

claims 5, 8, 9, 10 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakado, Cronin and Gardell in view of Clough (U.S. Patent No. 5,379,057);

claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakado, Cronin, Gardell and Clough in view of Ouellette (U.S. Patent No. 5,581,243);

claims 14 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakado in view of MacLeod (U.S. Patent No. 5,778,092).

Claims 1-19 are canceled. Claims 20-96 are added to particularly point out and distinctly claim the subject matter. Applicant respectfully submits that the pending claims recite limitations that are not in the references that were cited for the rejections of claims 1-19.

In at least one embodiment of the present invention, a host server computer renders the entire web page requested by the portable device (e.g., including text and links in HTML, java, graphics and others) into an image (e.g., using the virtual browser 6 illustrated in Figure 11) such that the portable device does not need the capability to format and render the web page. The image of the web page is transmitted (e.g., wirelessly) to the portable device for display (e.g., on PDA 18 illustrated in Figures 6-12). The image is typically larger than the size of the screen of the portable device (as illustrated in Figure 5). The image can also be larger than the size of the virtual browser 6 running on the server (as illustrated in Figure 11). Since the image of the entire web page is transmitted to the portable device, the user of the portable device can scroll the image on the portable device at the exclusive control of the portable device. Such an approach is significantly different from transmitting a screen image of a host computer to a terminal for display.

Yamakado discloses an apparatus for transmitting host computer screen data to the terminal as the bit-mapped data for screen display. The screen data on the host computer screen is transmitted for display on the terminal so that a user in front of the terminal can see the screen display of the host computer. If a document cannot be displayed within the screen of the host computer, only a portion of the document is displayed on both the host computer and the terminal. The terminal does not have the exclusive control over the display of an image of the document. For example, line 46 of col. 17 – line 5 of col. 17 of Yamakado describes the scrolling according to Yamakado. After scrolling at the host computer, a copy

command is transmitted to the terminal to reduce the quantity of screen data transmitted. Thus, the scrolling is not under the exclusive control of the terminal. In Yamakado, the terminal simply displays what appears on the screen of the host computer.

It is understood that the screen image of Yamakado is significantly different from the image rendered from an entire document, including text, graphics, hyper links in html, java, etc. The screen image typically contains only a portion of a document. When the document is scrolled on the host computer, the screen image is updated on the host computer so that updated screen image data has to be transmitted to the terminal for displaying on the terminal. If a user repeatedly scrolls to and away from a location in the document, the same portion of the document shown on the host computer has to be transmitted repeatedly to the terminal. Thus, the screen image of Yamakado is significantly different from the image rendered from an entire document. The embodiments recited in the claims are substantially different from the disclosure of Yamakado, Dorricott, Tso, Cronin, Gardell, Clough, Ouellette and MacLeod. For example, claims 20 and 32 recite:

20. (new) A method implemented on a server to serve documents, the method comprising:
receiving, at the server from a remote device, a request for a document, the document including text and one or more links; rendering, at the server and for displaying on a screen attached to the remote device, an image from the entire document in response to the request, the image being larger than a screen area on the remote device available for displaying the document; and sending, from the server to the remote device, the image in a compressed format as a response to the request for the document.

32. (new) A method implemented on a portable device to access remote documents, the method comprising:
- sending, from the device to a remote server, a request for a document,
the document having vector information including text;
receiving, at the device, an image in a compressed format from the
remote server, the image being rendered at the remote server
from the entire document in response to the request;
storing the image in the compressed format on the device; and
according to a user input to the device, selectively displaying only a
portion of the image on a screen attached to the device
according to the image stored on the device.

The terminal of Yamakado does not send a request for a document to the host computer; and, the terminal receives the screen data of the host computer, not the image rendered from the *entire* requested document (including text) as a response to the request for the document. Further, the terminal of Yamakado does not selectively display only a portion of the image rendered from the entire document according to the image stored on the terminal in response to a user input to the terminal. The disclosure of Yamakado, Dorricott, Tso, Cronin, Gardell, Clough, Ouellette and MacLeod does not suggest the embodiments as recited in claims 20 and 32.

Claims 55 and 62 recite machine readable media containing executable computer program instructions which when executed by a data processing system cause the system to perform the methods of claims 20 and 32, respectively. Claims 76 and 83 recite a server and a portable device for performing the methods of claims 20 and 32 respectively. Claims 21-31, 33-54, 56-61, 63-75, 77-82 and 84-96 depend from claims 20, 32, 55, 62, 76 and 83

respectively. Thus, claims 21-31 and 33-96 are patentable over the cited references at least for the above reasons.

Further, claim 44 recites:

44. (new) The method of claim 32, further comprising:
retrieving at least a portion of an image of a previously requested
document from a memory of the device, the image of the
previously requested document being previously received from
the remote server and stored in the memory of the device in a
compressed format; and
displaying at least the portion of the image of the previously requested
document.

The terminal of Yamakado does not store the downloaded images, rendered at the remote server from the requested documents, so that the stored images can be later retrieved from the memory of the terminal for display. It is understood that the description of Yamakado (Col. 9, line 66 – Col. 10, line 10) shows that the terminal of Yamakado has a screen memory, which is used to store the current screen image. There is no indication that the screen memory of the terminal of Yamakado stores the image of a previously requested document.

Further, claim 41 recites:

41. (new) The method of claim 32, further comprising:
receiving text inputs at the device;
storing text characters in a text file on the device according to the text
inputs;
retrieving the text characters from the text file; and
sending, from the device to the remote server, a message to enter the
text characters into the document on the remote server at a
location corresponding to a location on a portion of the image
displayed on the screen.

Yamakado does not have a description of retrieving and entering text characters, *stored in a text file on a terminal, into the requested document at the host computer*, where the requested document is rendered as an image at the host computer and sent to the terminal for display. The terminal of Yamakado displays the screen image of the host computer. However, from the description of Yamakado (Col. 1, lines 9-14; Col. 4, lines 51-56; Col. 9, line 66 – Col. 10, line 10; Col. 17, lines 39-45), it is not clear whether the terminal of Yamakado is capable of providing text characters into the document on the host. Yamakado has only a description of displaying the screen image of the host computer on the terminal.

Further, claim 33 recites:

33. (new) The method of claim 32, wherein the image comprises a plurality of sections; a first section of the plurality of sections that is not displayed on the device remains compressed on the device while one or more sections of the plurality of sections corresponding to the portion of the image displayed on the device are decompressed.

In one embodiment of the present invention, the image rendered from a remote document at a server is in a number of sections. The one or more sections that are currently on the display of the portable device is decompressed for display while other sections remain compressed. However, Dorricott (Col. 7, lines 9-18) teaches to decompress and cache the images that are not currently in display. Thus, Dorricott teaches away, even if it is combined with Yamakado.

Further, claim 52 recites:

52. (new) The method of claim 32, further comprising:
displaying a plurality of icons with at least a portion of the image on
the screen; and

responsive to receiving a selection of one of the plurality of icons,
transmitting from the device to the remote server a message to
execute a command with respect to the document at the remote
server.

However, the terminal of Yamakado only displays the screen image of the host computer. The client-server system for viewing network image of Cronin is vastly different from the system of Yamakado. It is not clear how the systems of Yamakado and Cronin may be combined to have a working system. The server of Cronin provides access to the digital document images stored on the server. With the client-server system of Cronin, it is not clear why one may want to use the teaching of Yamakado to view the screen image of the server of Cronin. Further, the content provided by the server of Cronin to a client is not on the screen of the server. Thus, even if Yamakado and Cronin were combined, the terminal of Yamakado would not have the content on the screen of the client of Cronin.

Further, Gardell is another system vastly different from Yamakado and Cronin. Yamakado teaches to display the screen image of a host computer. Cronin teaches to use a server to provide access to the digital document images stored on the server. Gardell teaches to use a television set top box (STB) to access web. To have regular functions of a web browser, one could simply use the web browser shown in Cronin (Item 20 in Figure 1 of Cronin). Applicant respectively submits that there is no motivation to combine Yamakado, Cronin and Gardell. Further, it is not clear what a combined system that may actually work looks like, if Yamakado, Cronin and Gardell were combined.

Further, claim 40 recites:

40. (new) The method of claim 35, further comprising:
receiving, at the device, a user selection of the location on the portion
of the image displayed on the screen;

transmitting, from the device to the remote server, a message to indicate the user selection; receiving, at the device from the remote server, a message to accept keyboard entry when the remote server determines that the document accepts text input at the location corresponding to the location on the portion of the image displayed on the screen; and

displaying a keyboard layout on the screen in response to the message to accept keyboard entry.

Clough (Col. 20, lines 8-12) discloses to produce a on-screen keyboard for the time necessary to enter the answer. However, there is no suggestion in the cited references that the keyboard layout on the screen is in response to the message to accept keyboard entry, where the message to accept keyboard entry is from the remote server in response to a determination that the selected location of the text, corresponding to the location of selection on the image displayed on the portable device, accepts text input. Thus, even if Yamakado, Cronin, Gardell and Clough were combined, the resulting system would not meet the limitation recited in claim 40.

Further, claims 23 and 39 recite:

23. (new) The method of claim 22, wherein the text input is received at the remote device from a touch screen keyboard; the message includes one or more matrix locations selected on the touch screen keyboard; and, the method further comprises:
determining, at the server, one or more text characters from the one or more matrix locations to enter the text characters into the document.

39. (new) The method of claim 35, wherein the text input is received at the device from a touch screen keyboard; the message includes one or more matrix locations selected on the touch screen keyboard; and, the remote server determines one or more text characters from the one or more matrix locations to enter the text characters into the document.

Ouellette teaches a phantom keyboard that is superimposed on a display screen of a computer. If the phantom keyboard is used with the terminal of Yamakado, the terminal of Yamakado determines the text characters from the matrix location, which is significantly different from using a touch screen keyboard with the portable device to collect the matrix locations and using the server, which is remote to the portable device, to determine the text characters from the matrix locations. Thus, even if Yamakado, Cronin, Gardell, Clough and Ouellette were combined, the resulting system would not meet the limitations as recited in claims 23 and 39.

Further, claims 30 and 50 recite:

30. (new) The method of claim 20, wherein the image rendered from the document comprises:
 - a first layer in a reduced color depth; and
 - one or more graphics portions with fine details to be overlaid over the first layer.
50. (new) The method of claim 32, wherein the image rendered from the document comprises:
 - a first layer in a reduced color depth; and
 - one or more graphics portions with fine details to be overlaid over the first layer;

wherein the first layer is decompressed for display on the screen
before the graphics portions are decompressed.

However, MacLeod (abstract) teaches to represent an image in a three-plane representation, which includes a reduced-resolution foreground plane, a reduced-resolution background plane and a high-resolution binary selector plane. The binary selector plane is used for selecting from either the foreground plane or the background plane. This is significantly different from a representation of a first layer in a reduced color depth and one or more graphics portions with fine detailed to be overlaid over the first layer. Thus, even if MacLeod and Yamakado were combined, the resulting system would not meet all the limitations as recited in claims 30 and 50.

Thus, Applicant respectfully submits that the claimed subject matters are substantially different from the disclosure of Yamakado, Dorricott, Tso, Cronin, Gardell, Clough, Ouellette and MacLeod.

Please charge any shortages or credit any overages to Deposit Account No. 02-2666.
Furthermore, if an extension is required, Applicant hereby requests such extension.

Respectfully submitted,

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